ABSTRACT

The invention relates to a solid laser, wherein a laser active material is pumped with the aid of at least one pump light source, e.g. of one of several laser diode arrays, at least in an approximately perpendicular manner in relation to the axis of a laser beam extending essentially inside said laser material. The pump beams are reproduced or focussed in said material with the aid of focusing optical elements, e.g. cylindrical lenses. At least one boundary surface, which is arranged opposite the incident surface, is provided in the material and is embodied in such a manner that the pump beams are reflected thereon and radiate once more through the laser material and/or such that an external reflector is arranged behind said opposite boundary surface and returns the pump beams into the material. The laser material can be doped in partial areas only.